



RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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November 16, 1998

James Shaffer, Remedial Project Manager
U.S. Department of the Navy
Northern Division
Naval Facilities Engineering Command
10 Industrial Highway
Code 1823-Mail Stop 82
Lester, PA 19113-2090

RE: Derecktor Shipyard Draft Feasibility Study, Naval Education and Training Center, Newport, Rhode Island

The Office has reviewed the Draft Feasibility Study for the Derecktor Shipyard Site, dated 29 September 1998. Attached are comments generated as a result of this review. If the Navy has any questions concerning the above, please contact this Office at (401) 277-2797 ext. 7111.

Sincerely,

A handwritten signature in cursive script that reads "Paul Kulpa".

Paul Kulpa, Project Manager
Office of Waste Management

cc: Warren S. Angell, DEM DSR
Richard Gottlieb, DEM DSR
Christopher Deacutis, DEM DWS
Robert Richardson, DEM DWS
Kymberlee Keckler, EPA Region I
Melissa Griffen, NETC

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**Comments on the Draft
Feasibility Study Derecktor Shipyard**

**1. Section 1.0, Introduction:
Page 1-2, Paragraph 2.**

The FS was developed to address both on-shore and off-shore contaminant issues at the site.

There are a number of outstanding issues concerning the remedial investigation conducted at the site. The Navy has agreed to address these issues as funds become available. Accordingly, as the SASE for the site has not been completed it is not possible to propose an FS for onshore component. Therefore the above should be modified as follows:

The FS was developed to address off-shore contaminant issues at the site.

**2. Section 1.4.1, Marine Sediment:
Page 1-20, Paragraph 3.**

This section of the report notes that the PCB congeners found at the site are similar to those found throughout the bay. A number of PCB transformers were known to exist at Derecktor shipyard. In addition, PCBs have been a component of a number of industrial chemicals, such as cutting oils, which may have been used at the site by Derecktor Shipyard or by the Navy. Therefore, the report should note that shipyard or Naval activities might be responsible for the PCBs found at the site.

**3. Section 1.5, Human Health Risk Assessment:
Page 1-28, Whole Section.**

This section of the report summarizes the results of the Human Health Risk Assessment. Based upon comments submitted to date by the State there are a number of outstanding issues concerning this assessment (such as the ingestion rate for the child/adult and subsistence fisherman). The regulatory agencies agreed to proceed with the PRG development and FS while these issues are resolved. The Office recommends that resolution be achieved for these issues prior to the submission of the final PRG document or the FS.

**4. Section 2.2.3.4, Proposed Remediation Areas:
Page 2-18, Paragraph 2.**

Note that areas 18 and 30 contain contaminants in sediments that exceed only one PRG (benzo(a)pyrene).

Preliminary Remediation Goals represent clean up standards for a select group of site contaminants. They do not represent the only contaminants of concern at a site, but rather

the primary drivers for site remediation. Accordingly, it is inappropriate to state that certain stations contain only one PRGs, as this would imply there is only one contaminant of concern at the site, which is not the case. Therefore, references to PRGs in this manner for this and other sections of the report should be removed or modified to state that other contaminants of concern may be present in addition to the PRGs.

**5. Section 3.3.6.2, Treatment/Disposal of Residue Water:
Page 3-27, Whole Section.**

This section of the report notes that treatment of residue water may be required. The report should note whether the treatment plant at Tank Farm # 5 could be employed for this task.

**6. Section 3.3.7.1, On-Base Treatment:
Page 3-20, Whole Section.**

This section of the report has limited on base treatment operations to solidification, chemical/physical fixation, such as the addition of Portland cement, to immobilize the contaminants. A variety of treatment operations exists which may be used to reduce or eliminate contaminants found in the sediments. As an illustration, phytoremediation has been used to remove both organic and inorganic contaminants. Likewise, a variety of soil washing operations may be employed to eliminate these contaminants. As the major cost component for the proposed dredging operations is disposal of the contaminated sediment any process which avoids this disposal cost should be evaluated. Therefore, this Office recommends that different processing operations be evaluated as a means of reducing or eliminating disposal cost. Finally, the Office will evaluate any innovative proposals, such as the use of the tank farms as a lay down area for soil washing, for the remediation of these sediments.

**7. Section 4.2.2, Alternative 2, Limited Action:
Page 4-6, Paragraph 1.**

This section of the report notes that the area would be closed to the collection of lobster. Lobsters are migratory and as such closure, as proposed in the report, will not eliminate this exposure pathway. Therefore, permanent closure of the affected area should not be considered as a viable alternative to address problems at the site and should be removed from the remedial alternatives.

**8. Section 4.2.2, Alternative 2, Limited Action:
Page 4-6, Paragraph 4.**

This section of the report states that affected area would be restricted to Naval activity. Accordingly, boating or other activities would not be allowed in this area. The report states that this restriction would be enforced by the Rhode Island Fisheries Division. Please note that approval by the Rhode Island Fisheries Division would have to be obtained before this option could be considered and carried forth in the Feasibility Study. In addition, the report should note whether the Navy will provide funds to the State so that it could enforce the Navy's boating restrictions.

**9. Section 4.2.2, Alternative 2, Limited Action:
Page 4-8, Paragraph 3.**

This alternative is considered worthy of consideration because while risk to the ecological receptors is identified, it is not great and it may not warrant a full scale removal of sediment.

The Office disagrees with the characterization of ecological risk at the site. The Ecological Risk Assessment has demonstrated an unacceptable risk exist at the site. Therefore, this statement should be removed from the report. The FS has also stated that resuspension associated with dredging may have an adverse impact on the ecology of the area. In past correspondence the Office has noted that resuspension of currently buried contaminated sediments due to ship traffic or storms will adversely affect the environment. In addition, the PRG delineates areas of potential resuspension. Accordingly, periodic intrusive activity, such as ship traffic or storms may increase the ecological risk at the site. The report should discuss this issue in this section of the report.

**10. Alternative 3A:Limited Removal and Off-Base Disposal;
Appendix D.**

This section of the report includes a cost breakdown for the project. Please indicate why a pick up truck rental would be required for activities anticipated to take place in the immediate vicinity of Pier 1.

**11. Alternative 3A:Limited Removal and Off-Base Disposal;
Appendix D.**

This section of the report states that it would cost \$ 1400 for each sediment sample confirmatory test. Confirmatory samples will be limited to the PRGs (less than eight analytes). Therefore it is not clear how the analysis of less than eight compounds will cost \$ 1400. Please provide a detailed cost breakdown for this element of the project.

**12. Alternative 3A:Limited Removal and Off-Base Disposal;
Appendix D.**

This section of the report indicates that water quality testing will cost \$ 3600 per day. Please provide the assumptions and a detailed cost breakdown, i.e. sample frequency (three per day?), analyte list (PCBs, PAHs, metals and TSS?), etc. used in this cost estimate.

**13. Alternative 3A:Limited Removal and Off-Base Disposal;
Appendix D.**

This section of the report states that it will cost \$ 4500 per day for the treatment of dredge water. Please provide the assumption and cost used to generate this value (gallons processed per day, size of treatment system, rental cost for treatment system, etc).

**14. Alternative 3A:Limited Removal and Off-Base Disposal;
Appendix D.**

This section of the report states that mobilization/ demobilization costs for the dredge equipment will be \$ 167,600. Please provide the vendor information in support of this cost as well as the dredging cost for the other alternatives.

**15. Alternative 3A:Limited Removal and Off-Base Disposal;
Appendix D.**

This section of the report indicates that it will cost \$ 1,649,810 to dredge the affected area. It is this Office's understanding that this cost is greater then the entire cost for dredging at Allens Harbor. Please provide the vendor information for this cost.

**16. Alternative 3A:Limited Removal and Off-Base Disposal;
Appendix D.**

This section of the report indicates that disposal in a RCRA subtitle D landfill will cost 85 dollars per ton. Please indicate whether this value includes shipping and handling. In addition, please provide the vendor information referenced in the report (i.e. disposal cost provided by landfills used in this estimate, i.e. Central, BFI, etc.).

**17. Alternative 3A:Limited Removal and Off-Base Disposal;
Appendix D.**

This section of the report indicates that it will cost 700 dollars for sediment analysis prior to disposal. Please provide a detailed cost estimate for this element of the project, (analytes, whether cost include collection and handling, etc.).

**18. Alternative 3A:Limited Removal and Off-Base Disposal;
Appendix D.**

This section of the report proposes the use of a complex dewatering system hydrocyclone, plate and frame filter press, pH adjustment, etc. Normally, a simple gravity dewatering system is employed, sediments are stockpiled and the water is removed from the sediment by gravity and is collected in berms which surround the stock pile. It is assumed that the costly, complex approach proposed in this plan for weight reduction which would manifest itself in cost savings for dredge spoil disposal. Please confirm and provide the engineering economic analysis in support of the proposal.